

ATTACHMENT 4

BUDGET

1. Detailed Cost Estimate

As part of RD 784's Drainage Basin C Improvement Fee Study, RD 784 has completed a detailed study of the costs of the project. This detailed cost estimate is included as Exhibit A attached to this document. This detailed cost estimate has been summarized within **Table 6** presenting the cost within the format required.

2. Sources of Funding

The sources of funding for the project are summarized in the Sources and Uses Statement prepared below. RD 784 has previously completed a portion of the project and is requesting credit for the State share of those costs of previously completed work to be applied toward the local share of costs for the remaining work.

**Reclamation District 784
North Drainage Basin C Regional Detention Basin and Pump Station 10
Proposed Sources & Uses Statement**

Item	Amount
PROJECT USES (Summarized by Prior vs. Future Work)	
Work Completed to Date [1]	\$ 6,970,576
Remaining Project Costs	\$ 8,499,385
TOTAL PROJECT USES	\$ 15,469,961
50% State Share of Total Project Uses	\$ 7,734,980
50% Local Share of Total Project Uses	\$ 7,734,980
PROJECT SOURCES	
Local Funding Sources	
Locally Funded Prior Completed Work [2]	\$ 6,970,576
RD 784 Cash on Hand	\$ 764,405
Sub-Total Local Funding Sources	\$ 7,734,980
Non-Local Funding Sources	
IRWM SWFM Grant (50% of Remaining Costs)	\$ 4,249,693
IRWM SWFM Grant (50% of Work Completed) <i>(Credit)</i>	\$ 3,485,288
Sub-Total Non Local Funding Sources	\$ 7,734,980
Total Project Sources	\$ 15,469,961

[1] Items previously completed are shown as highlighted items on the detailed project estimate.

[2] Funded from Local Developer Fees (via Dedications, Advanced Funding/Reimbursement Agreements with credit toward the fees)

As shown above, the 50% cost share for the project is \$7,734,980. RD 784 has completed \$6,970,576 of work to date and funded this work entirely from local sources. RD 784 proposes to fund the remaining costs of the work, \$8,499,385, from the IRWM SWFM Grant and cash the District has on hand. RD 784 is requesting that DWR provide \$3,485,288 of credit (50% of the completed work to date) to RD 784 to match the 50% of the remaining costs of the project.

DRAINAGE BASIN C

NORTH REGIONAL DETENTION BASIN AND PUMP STATION

	% of Total	Quantity		Unit Cost	Subtotal	Engineering, Inspection, Construction Management (15.0%)	General Contingency (10%)	Total
1. Lateral 15 Improvements 1.48%								
Clearing and Grubbing	0.02%	2.00	AC	\$1,000.00	\$2,000.00	\$300.00	\$200.00	\$2,500.00
Channel Excavation	0.86%	6,500	CY	16.00	104,000.00	15,600.00	10,400.00	130,000.00
Hydroseeding	0.02%	19,200	SF	0.12	2,304.00	345.60	230.40	2,880.00
Maintenance Path (12" AB on Fabric)	0.01%	500	SF	1.50	750.00	112.50	75.00	937.50
Land Acquisition	0.58%	2.00	AC	40,000.00	80,000.00	0.00	8,000.00	88,000.00
				Subtotal	\$189,054.00	\$16,358.10	\$18,905.40	\$224,317.50
				Annual Increase (Oct 2009 ENR = 8592 and Oct 2007 ENR = 8045) =				15,251.92
				Adjusted Costs =				\$239,569.42
2. Regional Detention Basin at Ella Road: 27.99%								
Clearing and Grubbing (Alt No. 1 Pond)	0.22%	31.16	AC	\$1,000.00	\$31,160.00	\$1,869.60	\$0.00	\$33,029.60
Excavation (Alt No. 1 Pond)	13.37%	695,000	CY	2.75	1,911,250.00	114,675.00	0.00	2,025,925.00
Compacted Embankment - Berm (Alt No. 1 Pond)	0.44%	23,100	CY	2.75	63,525.00	3,811.50	0.00	67,336.50
72 Inch Bore and Jack (under UPRR) (Pond Outfall)	1.45%	240	LF	750.00	180,000.00	21,600.00	18,000.00	219,600.00
72 Inch Inlet Structure	0.08%	2	LS	5,000.00	10,000.00	1,200.00	1,000.00	12,200.00
72 Inch Outlet Structure	0.08%	2	LS	5,000.00	10,000.00	1,200.00	1,000.00	12,200.00
Concrete Energy Dissipating Spillway (concrete)	0.00%	0	LS	475,650.00	0.00	0.00	0.00	0.00
72 Inch Storm Drainage Pipe (Pond Outfall)	1.50%	1,190	LF	180.00	214,200.00	12,852.00	0.00	227,052.00
72 Inch Bore and Jack (under UPRR) (Pond Outfall)	1.05%	200	LF	750.00	150,000.00	9,000.00	0.00	159,000.00
Maintenance Path (12" AB on Fabric) (Alt No. 1)	0.85%	70,000	SF	1.50	105,000.00	12,600.00	10,500.00	128,100.00
Miscellaneous Improvements (i.e. chain link fence, gate, minor grading) (Alt No. 1)	0.72%	1	LS	90,000.00	90,000.00	10,800.00	9,000.00	109,800.00
Land Acquisition (Alt No. 1 Pond)	8.23%	31.16	AC	40,000.00	1,246,400.00	0.00	0.00	1,246,400.00
				Subtotal	\$4,011,535.00	\$189,608.10	\$39,500.00	\$4,240,643.10
				Annual Increase (Oct 2009 ENR = 8592 and Oct 2007 ENR = 8045) =				288,332.10
				Adjusted Costs =				\$4,528,975.20
3. Ella Pond Expansion (Subshed B3A, B3B, and B6A): 18.44%								
Clearing and Grubbing	0.14%	19.10	AC	\$1,000.00	\$19,100.00	\$1,432.50	\$0.00	\$20,532.50
Pond Excavation	12.19%	625,000	CY	2.75	1,718,750.00	128,906.25	0.00	1,847,656.25
Erosion Control Measures	0.34%	19.10	AC	2,500.00	47,750.00	3,581.25	0.00	51,331.25
Inlet and Outlet Facilities	0.25%	1	LS	30,000.00	30,000.00	4,500.00	3,000.00	37,500.00
Maintenance Path (12" AB on Fabric)	0.48%	45,000	SF	1.50	67,500.00	5,062.50	0.00	72,562.50
Ella Road Frontage Improvement (curb, gutter, sidewalk, landscaping, storm, etc)	0.00%	0	LF	400.00	0.00	0.00	0.00	0.00
Land Acquisition	5.04%	19.10	AC	40,000.00	764,000.00	0.00	0.00	764,000.00
				Subtotal	\$2,647,100.00	\$143,482.50	\$3,000.00	\$2,793,582.50
				Annual Increase (Oct 2009 ENR = 8592 and Oct 2007 ENR = 8045) =				189,942.78
				Adjusted Costs =				\$2,983,525.28

DRAINAGE BASIN C

NORTH REGIONAL DETENTION BASIN AND PUMP STATION

4. Pump Station No. 10 - Regional Pump Station:	45.73%							
Mobilization/Demobilization	0.29%	1	LS	\$35,000.00	\$35,000.00	\$5,250.00	\$3,500.00	\$43,750.00
Compacted Embankment	0.30%	8,000	BCY	4.50	36,000.00	5,400.00	3,600.00	45,000.00
Compacted Embankment	0.30%	6,000	CCY	6.00	36,000.00	5,400.00	3,600.00	45,000.00
Class 2 Aggregate Base	0.07%	400	TN	20.00	8,000.00	1,200.00	800.00	10,000.00
Barb Wire Fence	0.07%	560	LF	15.00	8,400.00	1,260.00	840.00	10,500.00
Chain Link Fence (Type CL-6, Slatted)	0.07%	220	EA	40.00	8,800.00	1,320.00	880.00	11,000.00
20 Foot Chain Link Double Swing Gate (Type CL-6, Slatted)	0.03%	2	EA	2,000.00	4,000.00	600.00	400.00	5,000.00
5 Foot Chain Link Pedestrian Gate (Type CL-6, Slatted)	0.01%	1	EA	750.00	750.00	112.50	75.00	937.50
Vetrical Axial-Flow or Mixed Flow, Single Stage Impeller Type Pump (Byron Jackson 30 SPL or Casacade 20 MF or an approved equal)	2.35%	3	EA	95,000.00	285,000.00	42,750.00	28,500.00	356,250.00
150 HP High Efficiency Electrical Motor (U.S. Motor or General Electric or approved equal)	0.87%	3	EA	35,000.00	105,000.00	15,750.00	10,500.00	131,250.00
Motor Control Center and Electrical Panel (includes conduit, alarms, SCADA, sensors, generator ready system, telemetry, bollards, PG&E Service, and other incidental electrical work)	3.71%	1	LS	450,000.00	450,000.00	67,500.00	45,000.00	562,500.00
Backup Generator (includes fuel tank, FRAQMD/State air quality permit, and enclosure)	1.90%	1	EA	230,000.00	230,000.00	34,500.00	23,000.00	287,500.00
Pump and Motor Installation (includes all work to install and setup pump and motor inside the pump structure)	0.21%	3	EA	8,500.00	25,500.00	3,825.00	2,550.00	31,875.00
Pump Startup and Testing	0.11%	3	EA	4,500.00	13,500.00	2,025.00	1,350.00	16,875.00
PG&E Pole Relocation, Transfer Work, and Meter Panel (includes all work with PG&E)	0.37%	1	LS	45,000.00	45,000.00	6,750.00	4,500.00	56,250.00
Cast-in-Place Concrete (Motor Control Pad) (8 Inches thick with #4 rebar @ 12" oc each way)	0.04%	80	SF	60.00	4,800.00	720.00	480.00	6,000.00
Cast-in-Place Concrete (Back-up Generator Pad) (8 Inches thick with #4 rebar @ 12" oc each way)	0.07%	200	SF	40.00	8,000.00	1,200.00	800.00	10,000.00
Cast-in-Place Concrete (Transformer Pad) (8 Inches thick with #4 rebar @ 12" oc each way)	0.03%	60	EA	60.00	3,600.00	540.00	360.00	4,500.00
Generator Security Structure (includes masonry bloc wall, foundation, and concrete around generator)	0.29%	1	LS	35,000.00	35,000.00	5,250.00	3,500.00	43,750.00
Generator Stair Platform	0.11%	2	EA	6,500.00	13,000.00	1,950.00	1,300.00	16,250.00
Motor Control Center Security Structure (includes foundation and concrete slabs)	0.54%	1	LS	65,000.00	65,000.00	9,750.00	6,500.00	81,250.00
Security Lighting	0.05%	1	EA	6,500.00	6,500.00	975.00	650.00	8,125.00
Pump Station Complete (includes concrete structure, concrete stariway, pipe supports, retaining wall, pump supports, valve enclosure)	8.25%	1	LS	1,000,000.00	1,000,000.00	150,000.00	100,000.00	1,250,000.00
Pump Station - Miscellaneous Metals (Piping, valves, lids, access cover, bollards, handrails, guard rails, expanded metal grating, steel door, steel beams, pipe sleeves, spool, OSHA approved access ladder, and trash rack)	1.24%	1	LS	150,000.00	150,000.00	22,500.00	15,000.00	187,500.00
Dewatering - Pump Station Sump	0.54%	1	LS	65,000.00	65,000.00	9,750.00	6,500.00	81,250.00

DRAINAGE BASIN C

NORTH REGIONAL DETENTION BASIN AND PUMP STATION

5. Pump Station No. 10 Forcemain (Pump Station to Feather River Boulevard)								
Mobilization/Demobilization	0.12%	1	LS	\$15,000.00	\$15,000.00	\$2,250.00	\$1,500.00	\$18,750.00
Clearing and Grubbing	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00
Trench Sheet piling, Shoring, and Bracing as required by section 6707 of the California Labor Code	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00
48 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 48 Inch Precast RCP (ASTM C-76) or 48 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge) or 48 Inch PVC (AWWA C905)	5.16%	2,360	LF	265.00	625,400.00	93,810.00	62,540.00	781,750.00
36 Inch Class 150B Butterfly Valve (Mueller Lineseal III FLxFL Type or an approved equal)	0.16%	1	EA	20,000.00	20,000.00	3,000.00	2,000.00	25,000.00
36 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 36 Inch Precast RCP (ASTM C-76) or 36 Inch HDPE Discharge Pipe (AWWA C906 DR 17) or 36 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge) or 36 Inch PVC (AWWA C905)	0.12%	60	EA	250.00	15,000.00	2,250.00	1,500.00	18,750.00
Outlet Structure (Lateral 14)	0.07%	1	EA	8,500.00	8,500.00	1,275.00	850.00	10,625.00
36 Inch Automatic Drainage Gate (Waterman Model AF-41 or an approved equal)	0.04%	1	EA	5,000.00	5,000.00	750.00	500.00	6,250.00
Trench Restoration	0.97%	2,360	LF	50.00	118,000.00	17,700.00	11,800.00	147,500.00
Rock Slope Protection (Facing, method B) (Lateral 14 Outfall)	0.09%	120	TN	90.00	10,800.00	1,620.00	1,080.00	13,500.00
Storm Water Pollution Prevention Plan	0.04%	1	LS	5,000.00	5,000.00	750.00	500.00	6,250.00
6. Pump Station No. 10 Forcemain (Feather River Boulevard to Levee Crossing)								
Mobilization/Demobilization	0.12%	1	LS	\$15,000.00	\$15,000.00	\$2,250.00	\$1,500.00	\$18,750.00
Clearing and Grubbing	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00
Trench Sheet piling, Shoring, and Bracing as required by section 6707 of the California Labor Code	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00
48 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 48 Inch Precast RCP (ASTM C-76) or 48 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge) or 48 Inch PVC (AWWA C905)	5.25%	2,400	LF	265.00	636,000.00	95,400.00	63,600.00	795,000.00
36 Inch Class 150B Butterfly Valve (Mueller Lineseal III FLxFL Type or an approved equal)	0.33%	2	EA	20,000.00	40,000.00	6,000.00	4,000.00	50,000.00
36 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 36 Inch Precast RCP (ASTM C-76) or 36 Inch HDPE Discharge Pipe (AWWA C906 DR 17) or 36 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge) or 36 Inch PVC (AWWA C905)	0.12%	60	EA	250.00	15,000.00	2,250.00	1,500.00	18,750.00
Trench Restoration	0.20%	400	LF	60.00	24,000.00	3,600.00	2,400.00	30,000.00
Rock Slope Protection (Facing, method B) (Lateral 14 Outfall)	0.09%	120	TN	90.00	10,800.00	1,620.00	1,080.00	13,500.00
Storm Water Pollution Prevention Plan	0.04%	1	LS	5,000.00	5,000.00	750.00	500.00	6,250.00
7. Pump Station No. 10 Forcemain (Levee Crossing)								
Mobilization/Demobilization	0.16%	1	LS	\$20,000.00	\$20,000.00	\$3,000.00	\$2,000.00	\$25,000.00
Clearing and Grubbing	0.12%	1	LS	15,000.00	15,000.00	2,250.00	1,500.00	18,750.00
Trench Sheet piling, Shoring, and Bracing as required by section 6707 of the California Labor Code	0.16%	1	LS	20,000.00	20,000.00	3,000.00	2,000.00	25,000.00
36 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 36 Inch HDPE Discharge Pipe (AWWA C906 DR 17) or 36 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge)	1.62%	560	LF	350.00	196,000.00	29,400.00	19,600.00	245,000.00
36 Inch Class 150B Butterfly Valve (Mueller Lineseal III FLxFL Type or an approved equal)	0.33%	2	EA	20,000.00	40,000.00	6,000.00	4,000.00	50,000.00
Valve Utility Box and Lid Assembly (pipes greater than 18 inches) (box and lid shall meet H-20 loading) (Jensen 727272 Valve Box or an approved equal)	0.33%	2	EA	20,000.00	40,000.00	6,000.00	4,000.00	50,000.00
Siphon Beaker and Air Relief Valve (Harris HSB 05 A 36 or an approved equal)	0.16%	2	EA	10,000.00	20,000.00	3,000.00	2,000.00	25,000.00
Motor Actuator for 36" Gate Valve	0.11%	2	EA	6,500.00	13,000.00	1,950.00	1,300.00	16,250.00
Warning Sign at Levee Toe	0.00%	2	EA	300.00	600.00	90.00	60.00	750.00

DRAINAGE BASIN C

NORTH REGIONAL DETENTION BASIN AND PUMP STATION

8. Pump Station No. 10 Outfall Pipe/Open Ditch (Levee Crossing to Old River Channel)									
Mobilization/Demobilization	0.12%	1	LS	\$15,000.00	\$15,000.00	\$2,250.00	\$1,500.00	\$18,750.00	
Clearing and Grubbing	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00	
Trench Sheet piling, Shoring, and Bracing as required by section 6707 of the California Labor Code	0.13%	1	LS	16,000.00	16,000.00	2,400.00	1,600.00	20,000.00	
48 Inch Concrete Lined Cylinder Pipe (AWWA C301) or 48 Inch Precast RCP (ASTM C-76) or 48 Inch Corrosion Proofed Steel Discharge Pipe (3 Gauge) or 48 Inch PVC (AWWA C905)	2.95%	1,350	LF	265.00	357,750.00	53,662.50	35,775.00	447,187.50	
Outfall Structure	0.21%	1	LS	25,000.00	25,000.00	3,750.00	2,500.00	31,250.00	
48 Inch Automatic Drainage Gate (Waterman Model AF-41 or an approved equal)	0.05%	1	EA	6,500.00	6,500.00	975.00	650.00	8,125.00	
Channel Excavation (approx 1,450 feet)	1.46%	32,222	BCY	5.50	177,222.22	26,583.33	17,722.22	221,527.78	
Channel Embankment	0.69%	8,000	CCY	10.50	84,000.00	12,600.00	8,400.00	105,000.00	
Rock Slope Protection (Facing, method B)	0.18%	240	TN	90.00	21,600.00	3,240.00	2,160.00	27,000.00	
Storm Water Pollution Prevention Plan	0.25%	1	LS	30,000.00	30,000.00	4,500.00	3,000.00	37,500.00	
Erosion Control Seeding	0.12%	8.00	AC	2,000.00	16,000.00	0.00	1,600.00	17,600.00	
Right-of-Way Acquisition (Easement)	1.16%	8.00	AC	20,000.00	160,000.00	0.00	16,000.00	176,000.00	
Subtotal				\$5,564,022.22	\$808,203.33	\$556,402.22	\$6,928,627.78		
Annual Increase (Oct 2009 ENR = 8592 and Oct 2007 ENR = 8045) =								471,095.01	
Adjusted Costs =								\$7,399,722.79	
Total Shed A Drain Costs =				\$12,411,711.22	\$1,157,652.03	\$617,807.62	\$15,151,792.69		
Mitigated Negative Declaration =								50,000.00	
Post Project LOMR =								50,000.00	
Agency Permits (Corps 404, CVFPB, Fish and Game 1602, Water Quality 401, etc) =								65,000.00	
TOTAL								\$15,316,792.69	
Direct District Administration =								153,167.93	
Work Completed through Reimbursement Agreements =								(6,970,575.60)	
Funds Available =								(764,404.71)	
								\$7,734,980.31	

Table 6 - Project Budget
Proposal Title: RD 784 Drainage Basin C Regional Detention Pond and Pump Station Improvement Project
Project Title: Drainage Basin C Regional Detention Pond and Pump Station

		(a)	(b)	(c)	(d)	(e)
Budget Category		Non-State Share* (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$76,584	\$76,584	\$0	\$153,168	50.0%
(b)	Land Purchase/Easement	\$1,214,521	\$1,214,521	\$0	\$2,429,042	50.0%
(c)	Planning/Design/Engineering/ Environmental Documentation	\$370,909	\$370,909	\$0	\$741,818	50.0%
(d)	Construction/Implementation	\$5,413,287	\$5,413,287	\$0	\$10,826,573	50.0%
(e)	Environmental Compliance/ Mitigation/Enhancement	\$82,424	\$82,424	\$0	\$164,848	50.0%
(f)	Construction Administration	\$164,849	\$164,849	\$0	\$329,697	50.0%
(g)	Other Costs	\$82,500	\$82,500	\$0	\$165,000	50.0%
(h)	Construction/Implementation Contingency	\$329,907	\$329,907	\$0	\$659,814	50.0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$7,734,980	\$7,734,980	\$0	\$15,469,960	50.0%

***List sources of funding:**

Development Impact Fees
Dedications with Reimbursement Agreements
Dedications with Fee Credit Agreements
Advanced Funding Program - Developer Fees
~~Yuba County Water Agency Loans~~

Table 7 - Summary Budget
Proposal Title: RD 784 Drainage Basin C Regional Detention Pond and Pump Station

Individual Project Title		Non-State Share (Funding Match)	Requested Grant Funding (DWR Grant Amount)	Other State Funds Being Used	Total	% Funding Match
(a)	Project A	\$7,734,980	\$7,734,980	\$0	\$15,469,960	50.0%
(b)	Project B				\$0	0.0%
(c)	Project C				\$0	0.0%
(d)	Project D				\$0	0.0%
(e)	Project E				\$0	0.0%
(f)	Project F				\$0	0.0%
(g)	Project G				\$0	0.0%
(h)	Project H (add more rows for additional projects as necessary)				\$0	0.0%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$7,734,980	\$7,734,980	\$0	\$15,469,960	50.0%